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LISTING OF CLAIMS:

1. (Currently amended): A charge pump circuit comprising:
a voltage increasing stage, wherein the voltage increasing stage comprise at least one charge pump section:
a voltage decreasing stage in parallel with the voltage increasing stage, wherein the voltage decreasing stage comprises at least one charge pump section; and
a shared input to the voltage increasing and voltage decreasing stages,
wherein the ~~or~~ each charge pump section of the voltage increasing stage and of the voltage decreasing stage comprises a first input switch and output switch in series connected together at a first junction node, and a second input switch connected between the input and a second junction node, a first charge pump capacitor connected between the first junction node and a first control line and a second charge pump capacitor connected between the second junction node and a second control line, wherein the second junction node provides control signals for the first input and output switches.

2. (Currently amended): A circuit as claimed in claim 1, wherein the voltage increasing stage increases ~~is for increasing~~ an input voltage by an integer multiple of the difference between a low supply line voltage and a high supply line voltage and the voltage decreasing stage decreases the ~~is for decreasing~~ an input voltage by the ~~an~~ integer multiple of the difference between the a low supply line voltage and the a high supply line voltage.

3. (Canceled)

4. (Currently amended): A circuit as claimed in claim 1 3, wherein the voltage increasing stage comprises a plurality of charge pump sections, each for increasing the a corresponding input voltage by the difference between a low supply line voltage and a high supply line voltage.

5. (Canceled)

6. (Currently amended): A circuit as claimed in claim 1 5, wherein the voltage decreasing stage comprises a plurality of charge pump sections, each decreasing the a corresponding input voltage by the difference between a low supply line voltage and a high supply line voltage.

7. (Currently amended): A circuit as claimed in claim 1 3, wherein the ~~or each~~ charge pump section of the voltage increasing stage and of the voltage decreasing stage comprises an input switch and an output switch in series connected together at a junction node, and a charge pump capacitor connected between the junction node and a control line.

8. (Canceled)

9. (Currently amended): A circuit as claimed in claim 1 8, wherein complementary signals are applied to the first and second control lines.

10. (Currently amended): A circuit as claimed in claim 1 8, wherein non-overlapping signals are applied to the first and second control lines.

11. (Canceled)

12. (Currently amended): A circuit as claimed in claim 1 ~~11~~, wherein complementary signals are applied to the first and second control lines.

13. (Currently amended): A circuit as claimed in claim 1 ~~11~~, wherein non-overlapping signals are applied to the first and second control lines.

14. (Currently amended): A circuit as claimed in claim 1 ~~8~~, wherein the first input switch and output switch are operated in complementary manner.

15. (Currently amended): A circuit as claimed in claim 1 ~~8~~, wherein the a charge pump capacitor of at least one charge pump section of the voltage increasing stage and the a charge pump capacitor of at least one charge pump section of the voltage decreasing stage are connected together.

16. (Currently amended): A circuit as claimed in claim 1, wherein the voltage increasing stage increases ~~is for increasing~~ an input voltage by an integer multiple of the difference between a low supply line voltage and a high supply line voltage, and the voltage decreasing stage decreases the ~~is for decreasing~~ an input voltage by the ~~an~~ integer multiple of the difference between the ~~a~~ low supply line voltage and the ~~a~~ high supply line voltage, and wherein a voltage is applied to the shared input between the low supply line voltage and the high supply line voltage.

17. (Previously presented): An electronic device including a circuit as claimed in claim 1.

18. (Previously presented): A device as claimed in claim 17, wherein the device comprises a liquid crystal display.

19. (Previously presented): A device as claimed in claim 18, wherein the circuit and a TFT switching array for the display are provided on a common substrate.

20. (New): A charge pump circuit comprising:

a voltage increasing stage, wherein the voltage increasing stage comprise at least one charge pump section;

a voltage decreasing stage in parallel with the voltage increasing stage, wherein the voltage decreasing stage comprises at least one charge pump section; and

a shared input to the voltage increasing and voltage decreasing stages,

wherein the charge pump section of the voltage increasing stage and of the voltage decreasing stage comprises an input switch and an output switch in series connected together at a first junction node, and a charge pump capacitor connected between a junction node and a control line.

21. (New): A circuit as claimed in claim 20, wherein the voltage increasing stage increases an input voltage by an integer multiple of the difference between a low supply line voltage and a high supply line voltage and the voltage decreasing stage decreases the input

voltage by the integer multiple of the difference between the a low supply line voltage and the high supply line voltage.

22. (New): A circuit as claimed in claim 20, wherein the voltage increasing stage comprises a plurality of charge pump sections, each increasing a corresponding input voltage by the difference between a low supply line voltage and a high supply line voltage.

23. (New): A circuit as claimed in claim 20, wherein the voltage decreasing stage comprises a plurality of charge pump sections, each decreasing a corresponding input voltage by the difference between a low supply line voltage and a high supply line voltage.

24. (New): A charge pump circuit comprising:

a voltage increasing stage, wherein the voltage increasing stage comprise at least one charge pump section;

a voltage decreasing stage in parallel with the voltage increasing stage, wherein the voltage decreasing stage comprises at least one charge pump section; and

a shared input to the voltage increasing and voltage decreasing stages,

whercin the charge pump section of the voltage increasing stage and of the voltage decreasing stage comprises a first input switch and output switch in series connected together at a first junction node, and a second input switch connected between the input and a second junction node, a first charge pump capacitor connected between the first junction node and a first control line and a second charge pump capacitor connected between the second junction node and a second control line, and

wherein a charge pump capacitor of at least one charge pump section of the voltage increasing stage and a charge pump capacitor of at least one charge pump section of the voltage decreasing stage are connected together.